

sixty, far too many for me to attempt to give their titles at this time, yet none of them was so distinguished but that it received as well as conferred an honor by having his name upon its rolls. As a naturalist Coues will always hold the highest rank in the estimation of all who are familiar with his works, and in that galaxy of eminent names which sheds so great a brilliancy on the scientific annals of our own land, none shall appear in the years to come more lustrous than that of our late distinguished colleague and friend. But the brilliant mind no longer teems with thoughts of earth, and the hand that executed its commands lies motionless and we, who are drawing near to that shining portal through which he has so lately passed, and from whose farther side no steps are ever retraced by any one of mortal birth, may never look upon his like again, whose pen was the 'pen of a ready writer,' fit instrument to convey and render permanent the eloquence of thought, beauty of diction, and facility of expression, of Nature's illustrious Disciple and Interpreter.

IN MEMORIAM: GEORGE BURRITT SENNETT.¹

BORN JULY 28, 1840,—DIED, MARCH 18, 1900.

BY J. A. ALLEN.

SINCE our last meeting the American Ornithologists' Union has lost two of its Active Members, Elliott Coues and George B. Sennett. Dr. Coues's eminent services to science and literature have been ably commemorated in the memorial address by my esteemed friend and colleague, Mr. Elliot.

Dr. Coues, by education and through favoring circumstances, was a trained naturalist, endowed with mental gifts that enabled him to take the fullest advantage of the opportunities for research

¹ Read at the Eighteenth Congress of the American Ornithologists' Union, Cambridge, Mass., Nov. 13, 1900.

that fell to his lot, and thus to leave an indelible impress upon the history of the science to which he was primarily devoted.

Mr. Sennett was a man of marked business ability, and the manufacturing interests in which he was engaged left him through most of his life, little opportunity for scientific research; but he, too, impelled by the instincts of a true naturalist, has left his mark upon the progress of American ornithology, and has contributed not a little in the way of 'bricks and straw' to the construction of that edifice, for the perfection of which we are all lending our efforts, each in proportion to his opportunities and endowments.

George Burritt Sennett was born in Sinclairville, Chautauqua County, New York, July 28, 1840, and died at Youngstown, Ohio, March 18, 1900. He passed most of his life, however, in Erie and Crawford Counties, Pennsylvania. His ancestry on his father's side was Scotch and on his mother's side, English. He was the only child of Pardon Sennett, a successful business man, and a pioneer in the iron interests of western Pennsylvania, he at one time owning and operating three blast furnaces — at Erie, Mercer and Middlesex, Pennsylvania.

George B. Sennett was graduated from the Erie Academy, and later passed four years at a preparatory school in Delaware County, New York, where he fitted for Yale College. After creditably passing his entrance examination, however, the partial failure of his eyes, and the opportunity for travel abroad offered him by his father, led him to abandon his college course for a sojourn of four years in Europe. He traveled through Austria, Bavaria and Germany, residing for a considerable time in Vienna and Nuremberg, where he studied the German language; he also spent a year in Paris, there, under a special instructor, acquiring a fair knowledge of French. In later years he always referred with satisfaction to this long sojourn abroad, the information and experience thus gained proving valuable to him in his subsequent business career.

Soon after his return to this country, in 1865, he began the manufacture of oil-well machinery at Meadville, Pennsylvania, including, later, a new type of engine of his own invention. In 1896 he moved his extensive works to Youngstown, Ohio, and



Yours very truly
Geo. C. Smith

shortly before his death had reorganized his business as a stock company, of which he was the president and manager. In this way he hoped to become later so far relieved from business details that a large part of his time could be devoted to his old love, the pursuit of ornithology.

Mr. Sennett appears to have begun to take an active interest in the scientific study of birds about 1873 or 1874. This is attested by numerous specimens in his collection collected by himself at Erie, Pennsylvania, during this latter year. According to information kindly furnished me by Mr. Chapman, Mr. Sennett attributed the special awakening of his interest in birds to Dr. Coues's 'Field Ornithology,' which was published in 1874, a copy of which he bought as soon as he became aware of its appearance. This naturally led to correspondence with Dr. Coues, and later to their personal acquaintance and to the close relationship disclosed in Dr. Coues's editorial supervision of Mr. Sennett's papers on Texan ornithology, published in 1878 and 1879.

Mr. Sennett's first ornithological expedition was made in the spring of 1876, when he visited western Minnesota for the special purpose of ornithological investigation. The trip was very successful, as shown by the large series of specimens, especially of water birds, taken on this trip and still in his collection. He appears, however, never to have published anything relating especially to this season's work.

His second expedition was to the Lower Rio Grande region of Texas. As this later became his chosen field, the following transcript from his paper giving the ornithological results of his first trip to this region will be of interest. Under date of Erie, Pa., December 1, 1877, he writes, in his letter of transmittal, as follows: "Last winter, having inclination and leisure to prosecute the study of birds in a more extended field than was open to me at home, I began to look about for a suitable locality. As is always the case when real desire for study arises, avenues of investigation opened in all directions; but the weight of influence drew me to the Rio Grande. Arranging with Mr. F. S. Webster, of Troy, N. Y., to go as my assistant, and securing a complete outfit, I set out for Texas on February 23d of the present year. My plan was to work down the lower coast of Texas, and arrive

at Brownsville, as a base of future operations, before the breeding season had fairly commenced. On the evening of the 20th of March, after many vexatious delays, we arrived at Brownsville, our objective point. The country worked over lay between Point Isabel, on the coast, near the mouth of the Rio Grande, and a point a few miles above Hidalgo, embracing a distance of a hundred miles by road or three hundred miles by river. We were exactly two months on the southern border. Much valuable time was lost in going up and down the river, in procuring means of conveyance, and in acquainting ourselves with the country. The annoyances also were not few. On some days the weather was so intensely hot that birds were apt to spoil before we could prepare them

"The result of the trip was the securing of some five hundred birds, three of which are new to our fauna and one new to science; about a thousand eggs, many of which are new or rare; a few mammals, nearly all of which proved interesting; a number of alcoholic preparations of birds, mammals, and reptiles; and quite a collection of insects, principally Lepidoptera."

His report on this expedition forms a paper of 66 pages and is entitled, 'Notes on the Ornithology of the Lower Rio Grande of Texas, from observations made during the season of 1877 Edited, with Annotations, by Dr. Elliott Coues, U. S. A.' It was published in February, 1878, in Volume IV, of the 'Bulletin' of the United States Geological and Geographical Survey of the Territories (Hayden). It consists of an annotated list of 150 species, in some instances the annotations amounting to very full biographies of a number of species previously little known. The new species referred to is the *Parula nigrilora*; and the species added to the United States fauna are: (1) *Myiarchus crinitus erythrocerus*, now known as *Myiarchus mexicanus* (Kaup), previously taken, however, but not then recorded, by Dr. J. C. Merrill; (2) *Glaucidium ferrugineum*, now known as *Glaucidium phalaenoides*; and (3) *Æchmoptila* (Coues, n. g.) *albifrons*, now *Leptotila albifrons*, first recorded by Coues in July, 1877, on the basis of a specimen taken by Mr. Sennett at Hidalgo, in May, 1877. Several other species of Mr. Sennett's list had been made known as birds of the United States only the previous year through Dr. J. C. Merrill's work at Brownsville.

In the spring of the following year Mr. Sennett made a second trip to practically the same region, covering the months of March, April and May, 1878, although only about two months were spent in actual field work in Texas. He had as his assistant on this expedition Mr. J. H. Sanford of Grant County, Minnesota. The ornithological results of this trip were published in November, 1879, in Volume V of the same journal (pp. 371-440), forming a paper of 70 pages, entitled 'Further Notes on the Ornithology of the Lower Rio Grande of Texas, from observations made during the Spring of 1878,' edited and technically annotated by Dr. Coues. This list includes 168 species, adding 43 to his first list, and making a total of 193 species for the two expeditions, the result of about four months work in the field. About the same number of birds and eggs were obtained as on the first trip, with, in addition, a similar miscellaneous collection of mammals, reptiles, fishes and insects. The following five species of birds were added to the United States fauna, namely, (1) *Ornithion imberbe*, (2) *Pitangus derbianus*, (3) *Crotophaga sulcirostris*, (4) *Buteo albicaudatus* (now *Buteo albicaudatus sennetti*), and (5) *Scops asio enano* (now *Megascops asio trichopsis*). While edited, as was the former paper, by Dr. Coues, Mr. Sennett himself furnished most of the technical notes, Dr. Coues supplying only those relating to questions or nomenclature and synonymy. That he already had an excellent grasp of the technicalities and generalities of the subject is evident from his treatment of such species as *Lophophanes atricristatus*, *Auriparus flaviceps*, *Spermophila moreleti*, and especially of *Myiarchus crinitus erythrocerus*, *Crotophaga sulcirostris*, and *Meleagris gallopavo*. Under the latter, in discussing the Rio Grande form of the Wild Turkey, he suggests that "a var. *intermedia* " may have to be recognized, and in other cases foreshadowed, as under *Spermophila moreleti*, changes in nomenclature and the status of forms that have since been established.

Mr. Sennett's first paper on the birds of the Lower Rio Grande region showed him to be a field observer of unusual intelligence, and fully alert to every point of interest that came within his range of observation; while in the second paper he gave evidence of the expertness in discrimination and soundness of judgment so manifest in his later technical papers.

In 1882 Mr. Sennett made a third visit to Texas, arriving at Corpus Christi April 21, and continuing his work along the coast, chiefly in Nueces Bay, till May 12. He met there Captain B. F. Goss, of Milwaukee, Wisconsin, and had as his assistant on this trip Mr. J. M. Priour, who remained for some years in his employ as a collector in Texas and northeastern Mexico. Special attention was given on this trip to the water birds found breeding on the coast of Texas; and although his work was very successful, resulting in large collections of birds and birds' eggs, and a well-filled notebook, he never published anything relating to it.

Although this was his last visit to Texas, he did not relinquish this interesting field, continuing his work there through collectors employed by him to complete his Texas collections, he having early formed the plan of making Texas his special field, and of eventually publishing a work on the ornithology of the lower Rio Grande region of Texas and Mexico. In pursuance of this plan he enlisted the services of Mr. William Lloyd, who collected extensively for him in western Texas, in 1887. In this same year he sent Mr. J. M. Priour to the region of the lower Brazos River, and later to explore the coast region, or Tamaulipan district, of northeastern Mexico. Mr. Priour made a wagon trip from Corpus Christi to Tampico in 1888, amassing large collections, which threw much light on the faunal character of this then little known region, and helped to establish the boundaries of the Tamaulipan Fauna. As the country about Tampico proved very unhealthy, Mr. Priour nearly lost his life there from a tropical fever. The next season, 1889, to enable him to recuperate and to continue his work in a more salubrious region, Mr. Sennett sent him to the eastern base of the Sierra Madra, where for several months he collected in the vicinity of Monterey. The results of these important expeditions unfortunately still remain unpublished. It was Mr. Sennett's intention to work up this material and publish thereon at the earliest opportunity, but each year business exactions demanded more and more of his time and strength, so that he never obtained the necessary leisure to enable him to seriously or consecutively take up the task, which he looked upon as merely preliminary to his contemplated great work upon the ornithology of the Rio Grande region.

His proposed monograph of the birds of this region, for which he had been for so many years gathering material, at a very considerable outlay of both time and money, remains still unwritten. It was designed to be a quarto, with numerous colored and other illustrations, and quite a number of the colored plates had been prepared, the drawings having been made by Mr. Ernest Seton-Thompson several years ago. It is therefore peculiarly sad that when the time had nearly arrived when he could to a large extent lay aside business cares and devote his energies to the completion of the work that lay so near to his heart, that death should so suddenly terminate his career while still at the prime of his intellectual and physical powers, and his enthusiasm for scientific work unabated. It is, however, expected that through the liberality of Mrs. Sennett, who was devotedly attached to his interests, and especially interested in his scientific work, provision will be made for the preparation and early publication of his work on Texas birds.

As shown by the bibliography of his writings appended to this memorial, numbering some thirty titles, Mr. Sennett was not a prolific writer, but all of his papers are real contributions to science, and indicate that if he had been free to pursue his scientific aspirations, untrammelled by business interests, he would most certainly have attained enviable prominence as an investigator.

In addition to Mr. Sennett's visits to Minnesota and Texas, already detailed, he made, in 1886, two vacation trips to the mountains of western North Carolina, which form the basis of a paper, entitled 'Observations in Western North Carolina Mountains in 1886,' published in 'The Auk' for July, 1887. He also collected and observed birds for many years about his home in northwestern Pennsylvania. His first formal paper appeared in 1878, and related to his first Texas journey; his last paper was published in 1892, and is entitled 'Description of a New Turkey,' and is based on his Texas collections.

In 1883 Mr. Sennett deposited his collections of birds and mammals in the American Museum of Natural History, later presenting to the Museum his collection of mammals, numbering several hundred specimens, mostly from Texas and eastern Mexico.¹

¹ See Allen, J. A., 'On a Collection of Mammals from Southern Texas and Northeastern Mexico,' Bull. Am. Mus. Nat. Hist., Vol. III, No. 2, 1889, pp. 219-228. — An annotated list of 31 species. *Dipodops sennetti*, sp. nov.

It was his custom at this time, and till about 1896, to spend his winters in New York, and from about 1885 to 1893 he was able at this season to devote considerable time to ornithological work, — especially during the years 1884 to 1890, when most of his later ornithological investigations were made. In return for the storage and care of his collections on the part of the Museum, they were made freely available for scientific use, not only to the officers of the Museum, but to all specialists who might desire to consult them in their investigations. This harmonious coöperation was of great importance to the Museum, which further profited through the generous gift of specimens to supply desiderata for exhibition. As already implied, the collection, numbering over 8000 well prepared skins and nearly as many nests and eggs, is composed principally of material from Texas and north-eastern Mexico, and hence possesses special value as an exponent of the bird fauna of this portion of North America.

Mr. Sennett, though not a Founder, was one of the original members of the American Ornithologists' Union, having been elected at its first Congress held in New York City in 1883. In 1886 he was made Chairman of its Committee on the Protection of North American Birds, which position he held till 1893, or for seven years. He took a very active part in the work of the Committee, which, during the year 1886-87 held over twenty meetings at which a quorum was present, besides several informal meetings. It also prepared and distributed, under his direction, two large 'Bulletins' on bird protection, and drafted a stringent law for the protection of birds, which was afterward enacted with little change by the State of New York, and later by other States. Mr. Sennett contributed an important paper to the Committee's first Bulletin on the 'Destruction of the Eggs of Birds for Food,' as startlingly exemplified along the coast of Texas in the destruction of the eggs of Pelicans, Cormorants, Gulls, Terns, and Herons. In 1890 he delivered an address on 'Bird Legislation' before the State Board of Agriculture of Pennsylvania, which was published in the Board of Agriculture Report for that year. In this address the general subject of bird protection was admirably presented, with recommendations for future legislation by the State.

Mr. Sennett also took an active part in the work of the Linnaean Society of New York as long as he made that city his place of winter resident, and for three years (1887-89) was its President. He was rarely absent from its meetings, and took a prominent part in the presentation and discussion of papers.

As a public-spirited citizen, Mr. Sennett did much for the improvement of the town of Meadville, Pa., where his iron works were situated, during the two terms of his administration as Mayor, in 1877 to 1881. During this period many improvements in drainage, lighting, and paving were introduced, and new water-works were constructed, Meadville during this period passing from the status of a country village to a full-fledged city. To this work Mr. Sennett gave much time and energy, making a special study of the latest and best authorities on sewerage and other sanitary problems.

As regards his scientific work, already so favorably mentioned, it may be added that he was so conservative and thorough in his investigations that little that he has done will need revision. As evidence of this may be cited the ten new species and subspecies of North American birds described by him, all of which have found place in the A. O. U. Check-List. Aside from ornithology, he took a general interest in other departments of natural history, especially in mammals and insects, which he always collected when opportunity favored. These were presented to various scientific institutions, among which may be mentioned Cornell University, the American Museum of Natural History, and the State Cabinet at Albany.¹

My personal acquaintance with Mr. Sennett was made in 1878, shortly after his return from his second Texas trip, when he paid me the compliment of a brief call at my home in Cambridge, Mass. I knew him only casually from that time till the autumn of 1885, when I became intimately associated with him at the American Museum of Natural History in New York City. This associa-

¹ In 1884 the late J. A. Lintner published a partial report on the Lepidoptera collected on his first two Texas trips in Volume IV of 'Papilio' (pp. 135-147). This partial list numbers 61 species, four of which were described as new, and one, *Ecpantheria sennettii*, was named for Mr. Sennett.

tion continued for a considerable portion of each year for the following ten years, becoming interrupted later in consequence of Mr. Sennett's business engagements, which left him very little time for work on his collections at the Museum. This long association was marked by the utmost cordiality in all our relations. He was always genial, generous and just, liberal minded, and scrupulously conscientious. In this estimate of his character I am sure I voice the sentiments of all those who knew him most intimately. Of fine physique, and, up to the last few years of his life, possessed of robust health, his future seemed to promise a long period of activity and usefulness. During the winter of 1897, however, he suffered a severe attack of pneumonia, and for some time there seemed little chance of his recovery. Although surviving this nearly fatal illness, he never fully regained his health, and the complication of diseases from which, after a short illness, he died, was clearly traceable to the earlier attack. In his untimely death science has lost an earnest worker, the American Ornithologists' Union a worthy and devoted member, and those who were his intimate scientific associates a valued personal friend.

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Notes on 168 species, with much wholly new information on many of them.

1880. An Unusual Flight of Whistling Swans (*Cygnus americanus*) in Northwestern Pennsylvania. < *Bull. Nutt. Orn. Club*, V, April, 1880, pp. 125, 126.

Flocks of a dozen to thirty-five seen in Crawford, Mercer, Venango, and Warren Counties, March 22, 1879, so loaded with ice that they were nearly unable to fly; a number were shot and a few were taken alive.

1882. Capture of the Golden Eagle (*Aquila chrysaetos canadensis*) in Crawford County, Pennsylvania. < *Bull. Nutt. Orn. Club*, VII, Jan. 1882, p. 58.

1882. Chaparral Cock (*Geococcyx californianus*). < *Ornithologist and Oölogist*, VI, Jan. 1882, p. 86.

Mainly on the color of its eggs.

1882. "Fork-tailed Flycatcher." < *Orn. and Oöl.* VI, Feb. 1882, p. 93.

In correction of an error by another writer in a previous number of 'O. and O.'

1884. Nest and eggs of Couch's Tyrant Flycatcher (*Tyrannus melancholicus couchi*). < *Auk*, I, Jan. 1884, p. 93.

Found at Lomita Ranch, Rio Grande, Texas.

1884. Black-throated Auk (*Synthliborhamphus antiquus*) in Wisconsin. < *Auk*, I, Jan. 1884, pp. 98-100.

Shot on Lake Koshkonong, Wisconsin, by Rev. G. S. Gordon of Milwaukee.

1886. Ipswich Sparrow in Texas. < *Auk*, III, Jan. 1886, p. 135.

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Relates to the immature plumages of 10 species.

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1888. Descriptions of a New Species and Two New Subspecies of Birds from Texas. < *Auk*, V, Jan. 1888, pp. 43-46.

Psaltriparus lloydii, *Nyctidromus albicollis merrilli*, *Parus carolinensis agilis*.